Frequently Asked Questions about the
Draft Permitting Data Standard
August 8, 2001

The questions and answers are arranged in four categories:

- General
- Implementation
- Use of Standard
- Technical Questions for Implementers

General Questions:

Q1: **What is the Draft Permitting Data Standard?**

A: A "data standard" is a documented agreement among organizations that share or exchange data regarding representation, formats, and definitions for such data. The Permitting Data Standard provides a common vocabulary to be used by EPA, States, Tribes and local government agencies that want to share data about environmental enforcement and compliance activities. The Data Standard is made up of a list of Data Elements, each of which is defined. Relationships or linkages among Data Elements (both within the Permitting Data Standard and between it and other Data Standards) are also identified.

Q2: **The standard refers to "relationships" with other standards, such as the Facility Identifier and Chemical ID standards. Does this mean that these other standards are included in the Permitting Data Standard? How would this work in practice?**

A: Because environmental business areas are inter-related (e.g. facilities have permits, agencies take enforcement actions against organizations who own facilities and have permits), the standards for these areas are also naturally inter-related. For example, core information about a permit includes facility information (defined in the Facility ID standard) and information about chemical and biological parameters (defined in the Chemical and Biological ID standards). *Rather than reinvent or duplicate these existing standards, the Team has identified the importance of this information and essentially incorporated it by reference*.

The way in which such a relationship would be applied is best understood in the context of a "transaction" or exchange of data. Simple incorporation of existing standards, such as the Date Standard, is straightforward; one simply uses the prescribed format for the data element in the exchange of data. In more complex cases, it may be necessary to link two or more distinct records (e.g., Permit information and Facility information), each covered by its own standard. The fundamental requirement for establishing such a linkage is the ability to uniquely identify the set of things to be linked.

For example, in transmitting a set of permit records from one organization to another using common means of electronic file transfer (e.g., spreadsheet or fixed format file), it would be necessary to include information in each *permit* record that uniquely identified the *facility* to which the permit is issued (this might include EPA Facility Registry ID, State Facility ID, or other information). Additional facility information could be sent in an accompanying Facility file, consistent with the Facility ID standard. If the recipient already possessed the facility file or had ready access to that information, the unique facility identification information would be sufficient. Information about chemical or biological parameters regulated under a permit would be handled in analogous fashion. This process is depicted graphically below.

Q3: **Who developed the Permitting Data Standard – is this another federal mandate?**

A: No, this is not another federal mandate. The decision to develop Data Standards, including the Permitting Data Standard, was made jointly by EPA and the States (through The Environmental Council of the States (ECOS), an organization that represents the heads of the state environmental agencies). All recognized that

sharing and exchanging accurate data is important and will remain so. All recognized that the public increasingly expects and deserves to have access to compilations of current data about environmental permitting activities. Together, they established the Environmental Data Standards Council (EDSC) to manage and guide the process. Action Teams were established to develop several different Data Standards, including the Permitting Data Standard. The Action Team that developed the Permitting Data Standard was comprised of representatives from EPA, ECOS, several individual States, and an Indian Nation, and was co-chaired by an EPA and a State official.

Q4: **Why do we need this "common vocabulary"?**

A: There are many different environmental programs, and many different government agencies involved in environmental permitting. Often, these different programs or different permitting agencies use different names for activities or legal instruments that are functionally the same. In other instances, activities or instruments with the same or similar names are functionally quite different. For example, different state agencies may use terms such as wastewater discharge permit, SPDES permit or NPDES permit to refer to similar things – permits issued under the NPDES provisions of the Federal Clean Water Act (and equivalent state enabling legislation) to facilities discharging to waters of the United States.

If we are to share and compare data from different programs and different agencies, it is important that we put data about similar things (activities or instruments) into the same boxes, and data about different activities or instruments into different boxes, regardless of what they are called or named by the source of the data. In other words, we need to make sure that apples are compared to apples, even if we know that some are "Golden Delicious" and some are "Granny Smith," and even if in some places they are called "oranges."

Implementation of the Data Standard:

Q5: **Will my agency (or my program) be required to use the Permitting Data Standard?**

A: No State, Tribal or local government agency or program is required to adopt or use the Permitting Data Standard, nor to incorporate it into that agency's or program's own data systems. However, once EPA and state agencies adopt and begin implementing the Data Standard, it will likely become the specified "road map" for communications among environmental agencies exchanging environmental permit information.

Q6: **When is the Permitting Data Standard supposed to be approved by the States and EPA?**

A: The EDSC is expected to review and approve this standard after a 45 day comment period beginning in October of 2001.

Q7: **My agency regulates a number of facilities and other entities that have licenses or authorizations, but not permits per se. Are they covered by this standard?**

A: The Standard defines "permit" as a permit, authorization, license, or equivalent used to implement the requirements of an environmental regulation. This definition encompasses instruments not specifically called permits, but does not encompass all facilities, individuals, or entities that are regulated or are of interest to environmental management agencies. For example, the current definition would not include TRI facilities or RCRA generators, which must comply with regulations but which don't operate under an entity-specific permit or authorization. The Team invites comments on how well this standard would work for exchanging information about this broader set of regulated entities.

Q8: **Why are there so few data elements? Our programs/systems contain a lot more permitting data than this. And isn't most permit information specific to a particular program?**

A: The Permit Team decided to develop a simple, high-level standard that includes core data - information sufficient to identify a permit, as well as some information on administrative status and history - that is common across most organizations and programs. The Permit Team considered the pros and cons of developing a more detailed standard (e.g., with more information on permit requirements and content, more administrative information). The Team concluded that much of this more detailed information is program-

specific and that standardization of this program-specific data should be accomplished via the development of program-specific standards (consistent with this overall standard) and/or the development of Data Exchange Templates between information exchange partners. The Permitting Data Standard was not meant to include an exhaustive listing of all possible permitting data that any user might be interested in recording or tracking. Most users will have many more pieces of data in their own systems than are captured in the high-level Permitting Data Standard.

Q9: **Can some programs within a State, Tribe or local government follow the Permitting Data Standard, while others do not?**

A: Use of the Permitting Data Standard is not required, although over time it may become the standard for sharing or exchanging data to or through the EPA national data systems, as well as between state agencies. State, tribal or local government programs – especially those that do not exchange data with EPA , other Federal agencies or agencies in other states – are certainly not obliged to adopt or work within the Permitting Data Standard. However, as it becomes a widely accepted standard, they may find it useful to use it in data management and exchange.

Q10: **I am in a State, Tribal or local government agency. My program doesn't use the same data elements as are used in the Permitting Data Standard. Is there an expectation that we will change our data elements?**

A: No. The Data Standard uses terminology intended for data *exchange*, and is applicable only after the data you send crosses the threshold of your organization. Data that is exchanged will need to map to existing data holdings or conform in definition, meaning and format to the Standard.

Q11: **My EPA program doesn't use the same terms as are used in the Permitting Data Standard. Is there an expectation that we will change our own terminology?**

A: Although the Data Standard is intended for use in data exchange, it is expected that EPA programs will, as necessary (and over time), modify the data elements that they currently collect to conform with the Data Elements and terms in the Permitting Data Standard. The schedule for these changes is normally three years, with waivers in consideration of modernization and update schedules possible.

Q12: **Is the Permitting Data Standard the basis for a new data system design? Will we have to change our existing data system to conform to it?**

A: The answer for State, Tribal and local government agencies is No. The Permitting Data Standard is more like a dictionary to help translate or exchange data from any one data system to any other. Use of the Permitting Data Standard does not require that any non-EPA agency or program to change its current data system. Nor does it require that existing non-EPA data systems change their current nomenclature for permitting or similar activities (e.g., licenses or authorizations). When data is exchanged from one system to another, the Permitting Data Standard will provide the necessary information to insure that data from a given field in the sending system is "mapped" to the correct location in the receiving system. Local system designers may, once they choose to use this Data Standard for data exchange, elect to modify their system (perhaps in the context of a previously planned system modernization) in order to create the capability of exchanging data that conforms with the standard. As noted in the response to Question 8, above, EPA will be using the Data Standard as its own data systems are modified and updated.

Q13: **We are planning to update (one or more of) our current permitting data system(s). Can the Permitting Data Standard help us in this effort?**

A: Yes. If an environmental program or agency is planning to update its existing data system(s), the Permitting Standard can provide a useful, peer-reviewed template for the kinds of data that current good practice suggests might be recorded or tracked for a high level or summary perspective. The Permitting Data Standard does not go into the detail required for program managers, but instead provides high level or summary data.

Q14: **Are there any federal funds available to help States, Tribes, or local government agencies that implement federal programs if they choose to update their systems to enable them to communicate more easily using the Permitting Data Standard?**

A: Yes, although such funding is not linked directly to the Permitting Standard development effort. EPA has and will continue to provide grant funding to assist other levels of government that implement federal environmental programs. Such assistance has often been used by grantees to help develop and update data management systems.

Q15: **There are a number of Data Elements listed in the Permitting Data Standard that we don't currently record or track in our own data system. Will we now be required to do so?**

A: No. The presence of a given Data Element in the Permitting Data Standard does not create a new data collection requirement. State, Tribal and local government systems do not need to begin collection of all data for which there are Data Elements in the Data Standard.

Q16: **I currently provide a large amount of permitting data to EPA from my State (or Tribal or local governmental) agency. What does the Permitting Data Standard mean for that exchange?**

A: In the short term, probably nothing. However, as States and EPA modernize their systems, and work towards improved and integrated data exchange tools (see "Network" Question, below) this Data Standard will be used as the basis for new data exchanges. State and EPA data flows are governed by a complex set of mandates and agreements, which this Data Standard will not change. Instead, this Data Standard is intended as a proactive effort to coordinate State and EPA data flows. As EPA implements this Data Standard it will influence the data EPA seeks from States, and the way in which that data is to be transmitted**.**

Q17: **What does this standard have to do with National Environmental Information Exchange Network I keep hearing about? And I thought everything was supposed to be in XML – is this XML?**

A: The Network concept relies upon common "Data Exchange Templates" (DETs) expressed in "XML," and exchanged based on common protocols. This Data Standard would be used as the starting point or "core" for Permit-related DETs. Once established and approved, these flows would replace existing feeds to EPA's national data systems. For example, several states have used a DET based on the State/EPA Facility Identification Standard to exchange facility data with EPA and other States, using Network protocols. The XML expression of this Data Standard is under development right now (June, 2001), and should be available by the end of the Summer. From that point forward, a new DET for Permit would be based on this Data Standard.

Q18: **If the Data Elements or "common vocabulary" in the Permitting Data Standard doesn't really fit my program, but I have to use it anyway when exchanging data, won't that simply increase confusion, rather than reduce it?**

A: We believe this is very unlikely. As noted earlier, the Action Team that developed the Standard included members from a variety of states and different EPA programs, thus providing to the process a widely varied experience and considerable depth of expertise. Then the draft Data Standard was peer reviewed – it was shared with other programmatic experts at both the Federal and State level, and substantial further revisions were made to address issues and concerns raised by those peer reviewers. Finally, the Permitting Data Standard will now be distributed even more widely for another round of review and comment, and we are prepared to make further revisions if needed. Based on these efforts, we do not anticipate that the Permitting Data Standard will "force" users to create inaccuracies or cause confusion by having to "shoehorn" data into the particular pigeonholes created in the Standard. On the contrary, we believe that for the overwhelming majority of permit activities carried out throughout the country, at any level of government, there are appropriate and meaningful Data Elements within the Permitting Data Standard through which information about those activities and instruments can be accurately shared.

Use of Data Standard:

Q19: **Who will use the Permitting Data Standard?**

A: All Federal, State, Tribal and local government agencies involved in issuing or managing environmental permits or authorizations, or who manage permitting data, are encouraged to use the Permitting Data Standard when and if they share or exchange data with other agencies. They are also encouraged to refer to the Permitting Data Standard, and use it as a tool, if they are planning to update or enhance their own existing data systems. The public will be the ultimate user of the Data Standard, because it will provide the common vocabulary that will help such end users better understand the meaning of the data they are looking at.

Q20: **Will EPA be issuing rules for use of the Permitting Data Standard?**

A: No, at least not in the sense of issuing formal regulations, information on the standard will be available through the EDSC website and the Environmental Data Registry (EDR).

Q21: **Will the Permitting Data Standard be open for revision in the future? How will the Standard be maintained?**

A: Yes. There is every reason to expect that adjustments or revisions will be necessary in the future. The need for revisions may arise in at least two areas: (1) Environmental programs evolve, and new programs may be added. This will necessitate, at a minimum, revisions and additions to the lists of Permissible Values associated with certain Data Elements. (2) Once in use, we may discover flaws in the Data Standard that need to be corrected (e.g., linkages and relationships that need to be adjusted; additional levels of detail that should be provided; etc.) EPA and ECOS expect to maintain an ongoing institutional mechanism to make needed revisions in the future.

Technical Questions for Implementers:

Q22: **Do all permits have "permitted features?"**

A: Data elements 11 to 13 refer to "permitted features". Most permitted entities will have at least one "permitted feature," such as a stack, storage unit or outfall. The standard also allows for multiple permitted features for more complex facilities. In some cases, a facility (or other permitted entity) may have no specific permitted features but nevertheless be subject to general requirements such as reporting, personnel training or facility-wide best management practices. In such a case, the standard allows the flexibility not to specify any permitted features.

Q23: **Do we need to use the Permissible Values from the Data Standard?**

A: Permissible Values characterize the exact names, codes, and text that can be stored in a data field in an information system. Where the standard specifies permissible values (e.g., Permit Type includes permissible values such as Air – Title V and RCRA – Part A), agencies using the standard should use the specified value to describe a permit record if it is appropriate – even if the agency in question uses a different term (such as Major Air Operating Permit or Hazardous Waste Interim Permit). By taking the effort to use these standard designations, agencies make the fullest use of the standard and assure more accurate data exchange and interpretation.

Q24: **What if I wish to exchange information that isn't covered by the listed Permissible Values? Does this mean I can't use the standard?**

A: No. The Action Team believes that the Permitting Data Standard will be appropriate for exchanging information about a broad range of permits, licenses and authorizations at the Federal, State, Tribal and local levels of government. The Team developed proposed Permissible Values for widely used major permit types authorized under Federal environmental laws. The Team anticipates that users exchanging information about permit types beyond those listed will work out additional permissible values in the context of individual data exchanges among specific data exchange partners. The Team is interested in comments on the workability of such a "partially managed" set of permissible values. The Team also

invites comment on whether it would be desirable to develop more extensive lists of permissible values (for example, covering permit types such as solid waste landfill permits common to many state, tribal and/or local environmental agencies).

Q25: **Do data elements in our application systems need to be the same data type as the Standard Data Element? What if our Data Element field lengths are longer or shorter than the standard?**

A: This Standard only specifies how information will be exchanged, not how systems should be designed. At times, differences between system parameters and Data Standard specifications may require some translation from a system that uses field lengths, etc. Field lengths in the standard are intended to accommodate the expected maximum length of the values across partner systems based on analysis conducted to date. If a system has a longer value for a given element and the organization wishes to exchange data using the standard, the value exported from the system would have to be adjusted (e.g. truncated or abbreviated). Field lengths in the standard can be increased if partner needs require this, through the maintenance review of the standard.

Q26: **Why isn't the Permit Number/Identifier sufficient to identify a permit uniquely? Why does this matter?**

A: Unique identification of a permit is important because it allows one permit to be positively identified and distinguished from all others (even those that may have similar names, etc.) One of the objectives of this Permitting Data Standard is to provide a means of uniquely identifying permits across agencies, programs and levels of government, so that information can be exchanged without confusion. Permit identifiers issued by permitting agencies are typically unique within a program, but not necessarily within an agency. There is typically no assurance that one state's identifying numbers are different from another's. For this reason, the standard specifies a combination of data elements (Permit Number/Identifier, Name of Issuing Organization and Permit Type) that it believes will provide unique identification of a permit.